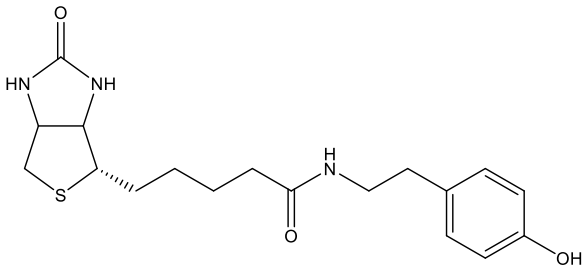
Catalog # 10-3446
Biotinyl Tyramide

CAS# 41994-02-9

(3aS,4S,6aR)-Hexahydro-N-[2-(4-hydroxyphenyl)ethyl]-2-oxo-1H-thieno[3,4-d]imidazole-4-pentanamide

Biotin-phenol

Lot # S104175



Reagent for use in catalyzed reporter deposition (CARD) signal amplification protocols in a variety of immunoassays in which, horseradish peroxidase catalyzed deposition of biotinyl tyramide is detected with labeled streptavidin.[1] Widely used for signal amplification in fluorescent *in situ* hybridization (FISH) protocols.[2] May be used for signal amplification in a sandwich ELISA for quantification of α-tubulin isotypes.[3] Reagent for "self-biotinylation" of DNA G-quadruplexes.[4] May be used with APEX-mediated biotin labeling to identify protein-protein interactions.[5]

1) Bobrow *et al*. (1989), *Catalyzed reporter deposition, a novel method of signal amplification. Application to immunoassays*; J. Immunol. Methods, **125** 279
2) Evans *et al*. (2003), *Optimization of biotinyl-tyramide-based in situ hybridization for sensitive background-free applications in formalin-fixed, paraffin-embedded tissue specimens*; BMC. Clin. Pathol., **3** 2
3) Draerova *et al*. (2013), *Quantification of a-tubulin by sandwich ELISA with signal amplification through biotinyl-tyramide or immune-PCR*; J. Immunol. Methods, **395** 63
4) Einarson and Sen (2017), *Self-biotinylation of DNA G-quadruplexes via intrinsic peroxidase activity*; Nucleic Acids Res., **45** 9813
5) Hwang and Espenshade (2016), *Proximity-dependent biotinlabelling in yeast using the engineered ascorbate peroxidase APEX2*; Biochem. J., **473** 2463

PHYSICAL DATA

Molecular Weight:	363.47
Molecular Formula:	$C_{18}H_{25}N_3O_3S$
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 35 mg/ml) or Ethanol (up to 20 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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